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Applicant: Fukuda

Application Serial No. 10/674,752

First Amendment and Response to Non-Final Office Action

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REMARKS

Prior to this Amendment and Response, Claims 1-17 were pending. In the present Amendment and Response, applicants amended Claims 2-5 and 8-17 to correct punctuation and typographical errors. Applicant amended Claim 15 to delete a term rejected by the Examiner. The amendments do not introduce any new matter. Upon entry of the present amendment, Claims 1-17 will be pending.

Specification

The Examiner objects under 35 U.S.C. § 132 to the amendments filed September 30, 2003. The Examiner asserts that the amendments to the specification that deleted the references to the "shoots of pine leaves" altered the initial disclosure in a manner that introduced new matter to the application. Applicant respectfully traverses the objection. Applicant respectfully asserts that the amendments do not introduce new matter.

Applicant respectfully asserts that the amendments deleting the references to the "shoots of pine leaves" in the specification correct an obvious unintentional error in the specification and do not introduce any new matter for at least this reason.

An amendment to correct an obvious error does not constitute new matter where one skilled in the art would not only recognize the existence of error in the specification, but also an appropriate correction.

See MPEP 2163.07(I) (2004) citing *In re Oda*, 443 F.2d 1200, 170 USPQ 268 (CCPA 1971).

One of ordinary skill in the art in the field of the invention would know that the term "shoots of pine leaves" is erroneous. One of ordinary skill in the art in the field of the

invention would also know that the correct term is "shoots of pine," "pine shoots," or "shoots." The term "pine shoots" denotes new growth of pine, also referred to as "candles." The term "pine needles," on the other hand, refers to pine leaves. The language "shoots of pine leaves" is incorrect and does not describe any part of a pine. See Exhibits A and B for explanation of the meaning of the terms "shoots" and "needles" as used by those of ordinary skill in the art in reference to pine. Applicant also encloses Exhibit C that illustrates the parts of pine for the Examiner's reference. Applicant respectfully requests the Examiner to withdraw the objection to the amendments filed September 30, 2003, at least because the amendments correct an obvious error and, therefore, do not introduce any new matter.

Applicant also asserts that the amendments are supported by the specification as originally filed. The specification as originally filed teaches in the section *The Best Mode for Carrying out the Invention* on p. 7, last paragraph, through page 8, first paragraph, "adding to the saccharides aqueous solution a shoots of plant belonging to the family Pinaceae" [*sic*], "[t]he shoots collected from any kind of plants belonging to the family Pinaceae" [*sic*], "collecting the shoots," and that "the shoots at the peak of the branch are preferably collected." Therefore, amendments filed September 30, 2003, are supported by the specification as originally filed and do not introduce any new matter.

Furthermore, applicant asserts that the amendments are supported by the foreign priority document. MPEP provides that applicant may rely on the disclosure of the foreign priority document when the U.S. application explicitly incorporates the foreign priority document by reference. See MPEP 2163.07(I) (2004). The present application claims priority to the Japanese Patent Application No. 2000-184541 and explicitly incorporates its by reference on page 1, first paragraph. To refer to the pine shoots used in the compositions and methods of the applicant's invention, the foreign priority uses a Japanese term denoting

shoots. Therefore, amendments filed September 30, 2003, are supported by the foreign priority document explicitly incorporated by reference and do not introduce any matter.

In summary, amendments filed September 30, 2003, (1) correct an obvious error, (2) are supported by the specification by the originally filed, and (3) are supported by the explicitly incorporated by reference foreign priority document. In view of the foregoing, applicant respectfully request withdrawal of the objection under 35 U.S.C. § 132 to the amendments filed September 30, 2003, and entry of the amendments.

Rejection of Claims under 35 U.S.C. §112, Second Paragraph

The Examiner rejects Claim 15 under 35 U.S.C. §112, second paragraph, as indefinite due to the term "spontaneous fermentation." Applicant amended Claim 15 to delete the term "spontaneous." Applicant respectfully asserts that the amendment overcomes the rejection and request its withdrawal.

Rejection of Claims under 35 U.S.C. §102 (b)

The Examiner rejects Claims 1-6, 16 and 17 under 35 U.S.C. §102(b) as anticipated by Japanese Patent No. 61289865 (hereinafter "the '865 patent"). The Examiner asserts that the '865 patent teaches applicant's claimed composition. Applicant respectfully traverses the rejection.

Applicant respectfully assert that the '865 patent fails to teach an element of the composition claimed in Claims 1-6, 16 and 17. Therefore, the '865 patent fails to anticipate compositions claimed in Claims 1-6, 16 and 17. The '865 patent teaches obtaining a pine extract by washing red pine needles and sprouts with water, chopping them, and putting them into a container together with mushrooms and sugar syrup for fermentation, and (see page 1,

left column, lines 3-16). Therefore, the product according to the teaching of the '865 patent, is obtained by fermentation of pine sprouts, pine needles and mushrooms with sugar and water. The Examiner notes that the term "pine sprouts" is synonymous with the term "pine shoots." The '865 patent teaches that its method relies on the multiplier effects of fermentation of **pine needles, mushrooms, and sugar** (see page 1, left column, lines 3-16). Therefore, the properties of the product obtained by the process taught by the '865 patent result from fermentation of pine needles, mushrooms and sugar, not fermentation of pine shoots or sprouts.

In contrast, applicant's claimed compositions comprise a product of fermentation of **pine shoots with sugar and water**. Applicant discusses in the previous section of this Response that pine needles and pine shoots are different structures of a pine. Claims 1-6 recite a composition comprising "shoots of the plant belonging to the family Pinaceae mixed with water and saccharide and fermented." Claim 16 recites a composition produced by fermenting shoots of plants belonging to the family Pinaceae with water and saccharide. Claim 17 recites a composition produced by fermenting pine shoots with water and sugar. The applicant's novel compositions claimed in Claims 1-6, 16, and 17 possesses novel properties resulting from processes recited in the claims. Specifically, the rejected claims recite fermentation of pine shoots, sugar and water.

The '865 patent fails to teach processes recited in Claims 1-6, 16 and 17. Particularly, the '865 patent fails to teach fermenting pine shoots with water and saccharide or sugar. Fermentation of pine shoots, pine needles and mushrooms that the '865 patent teaches **relies on multiplier effects of fermentation of pine needles, mushrooms and sugar for its properties**. Therefore, the resulting product will fail to possess the novel

properties of applicant's claimed composition. Therefore, the '865 patent fails to teach applicant's product.

In view of the foregoing, applicant respectfully asserts that the '865 patent fails to anticipate Claims 1-6, 16 and 17. Applicant respectfully requests withdrawal of the rejection of Claims 1-6, 16 and 17 under 35 U.S.C. §102(b).

Rejection of Claims under 35 U.S.C. §103(a)

Claims 7-14

The Examiner rejects Claims 7-14 under 35 U.S.C. §103(a) as obvious over the '865 patent. Applicant respectfully traverses the rejection. Applicant respectfully asserts that the '865 patent fails to teach, suggest, or provide motivation to derive a method of producing a remedy for allergic diseases claimed in Claims 7-14 and fails to render it obvious.

The Examiner asserts that the '865 patent teaches a product obtained by fermentation of pine shoots. Applicant respectfully disagrees. Applicant respectfully asserts that the '865 patent fails to teach, suggest, or provide motivation to derive a process of fermenting pine shoots with sugar and water or a product of such process. Applicant discusses in the previous section that the '865 patent teaches fermentation of pine shoots, pine needles, mushrooms and sugar. The '865 patent fails to teach applicant's claimed method of fermenting pine shoots, sugar and water.

The Examiner asserts that the end product of the process taught by the '865 patent is the same as the product of applicant's claimed method. Applicant respectfully disagrees. The product that the '865 patent generates is a product with the properties resulting from multiplier effects of fermentation of pine needles, mushrooms and sugar (see page 1, left

column, lines 3-16). Applicant's claimed method produces a novel remedy for allergic diseases by fermenting pine shoots, sugar, and water. The product produced by the method taught by the '865 patent will fail to possess the novel properties of a product obtained by applicant's claimed method. Therefore, the '865 patent fails to teach the product obtained by applicant's claimed method.

The '865 patent fails to suggest or provide motivation to derive applicant's claimed method. The '865 patent fails to suggest or provide motivation to omit mushrooms or pine needles from the fermentation process. In fact, the '865 patent teaches away from leaving out mushrooms or pine needles from the fermentation, because the method of the '865 patent relies on the combination of pine needles, mushrooms and sugar for generating the properties of its product. Therefore, the '865 patent fails to suggest or provide motivation to derive a method of fermenting pine shoots, water and sugar.

The Examiner asserts that applicant has to demonstrate a difference in the mixing order. Applicant respectfully asserts that the mixing order is not necessary for distinguishing the applicant's claimed method and the method of the '865 patent. The Examiner also asserts that, absent demonstration of unexpected results from the parameters of applicant's claimed process, such as time and temperature, the optimization of ingredient amount would have been obvious at the time of applicant's invention. Applicant respectfully brings to the Examiner's attention that the invention as claimed in Claims 7-14 is a novel process of producing a remedy for allergic diseases by fermenting pine shoots, sugar and water. The '865 patent fails to teach, suggest or provide motivation to derive fermentation of pine shoots, sugar and water. Therefore, the '865 patent fails to teach, suggest or provide motivation to derive an element of applicant's claimed method, and fails to render applicant's claimed method obvious.

The Examiner states that the '865 patent fails to teach producing a remedy for allergic diseases. Nevertheless, the Examiner asserts that the method taught by the '865 patent would function the same as applicant's claimed method. Applicant respectfully disagrees. As discussed above, the '865 patent teaches a method that relies on multiplier effects of fermentation of pine needles, mushrooms and sugar (see page 1, left column, lines 3-16), but fails to teach applicant's claimed of fermenting pine shoots, sugar, and water. Applicant's claimed method produces a novel remedy for allergic diseases. The '865 patent fails to teach applicant's claimed method and fails to teach or suggest that the method it teaches produces a remedy for allergies. The properties of the product obtained by the method taught in the '865 patent rely on fermentation pine needles, mushrooms and sugar. Therefore, the product of this process will fail to possess the same characteristics as the product of applicant's claimed method and will fail to function equivalently.

In view of the foregoing, applicant respectfully asserts that the '865 patent fails to teach, suggest, or provide motivation to derive applicant's invention claimed in Claims 7-14 and fails to render applicant's invention obvious. Applicant respectfully requests withdrawal of the rejection of Claims 7-14 under 35 U.S.C. §103(a) over the '865 patent.

Claim 15

The Examiner rejects Claims 15 under 35 U.S.C. §103(a) as obvious over the '865 patent as applied to Claims 7-14 and further in view of JP 07-0159538 (hereinafter "JP '538"). The Examiner asserts that the '865 patent and JP '538 render the method of Claim 15 obvious because the '865 patent teaches the fermentation method recited in Claim 15, and JP '538 teaches fermenting pine products under direct sunlight. Applicant respectfully traverses the rejection. Applicant respectfully asserts that the '865 patent and JP '538, separately or in combination, fail to teach, suggest, or provide motivation to derive a

method of producing a remedy for allergic diseases recited in Claim 15 and fail to render it obvious.

Applicant discusses in the previous section that the '865 patent fails to teach, suggest, or provide motivation to derive a process of fermenting pine shoots with sugar and water or a product of such process. The '865 patent teaches fermentation of pine sprouts, pine needles and mushrooms, but fails to teach applicant's claimed method of fermenting pine shoots, sugar and water. The properties of the product produced by the process taught in the '865 patent depend on the multiplier effects of fermentation pine needles, mushrooms and sugar. Therefore, this process will fail to produce the novel remedy for allergic diseases produced by the novel method recited in Claim 15. Even if one were to combine the teaching of the '865 patent with the teaching of JP '538 of fermenting pine products under the sunlight, this combination would not result in the method recited in Claim 15.

In view of the foregoing, applicant respectfully asserts that '865 patent and JP '538, separately or in combination, fail to render Claim 15 obvious. Applicant respectfully requests withdrawal of the rejection of Claims 15 under 35 U.S.C. §103(a) over the '865 patent, and further in combination with JP '538.

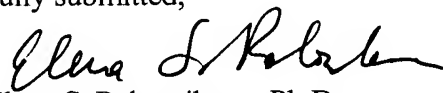
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CONCLUSION

The foregoing is submitted as a full and complete response to the Non-Final Office Action mailed October 19, 2004.

Applicants assert that the claims are in condition for allowance and respectfully request that the application be passed to issuance. If the Examiner believes that any informalities remain in the case that may be corrected by Examiner's amendment, or that there are any other issues which can be resolved by a telephone interview, a telephone call to the undersigned agent at (404) 815-6102 is respectfully solicited.

Respectfully submitted,


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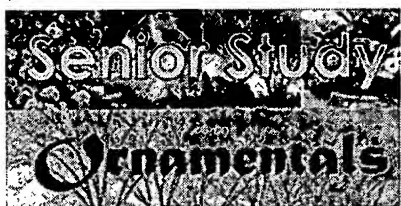
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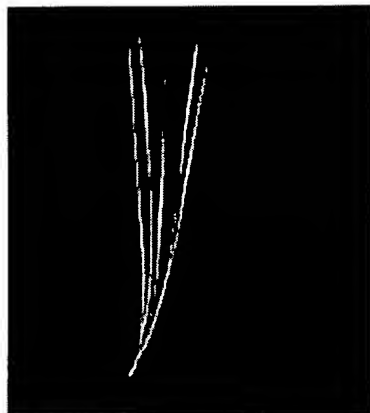
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Pine - Needles



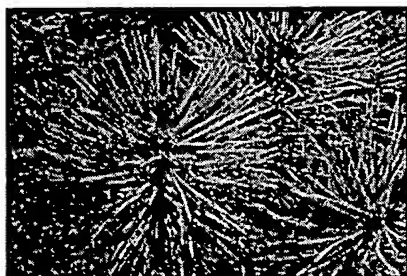
Pine needles are attached to the twig in "bundles" of 2-5 needles, depending on the species.



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Pine - Shoot



Pines produce their new growth in short shoots called "candles" each spring.



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What conditions do I need to grow conifers?

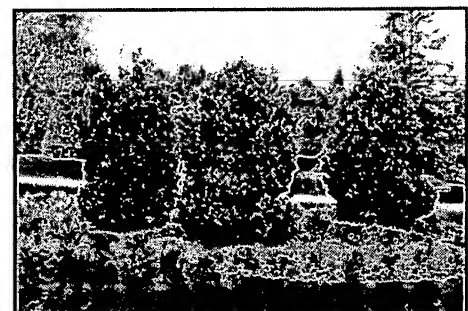
Depending on your soil type, available sunlight, and climate, you can choose a conifer that is very likely to succeed no matter where you live. For most conifers, slightly acid soil that is loamy and well-drained is ideal. Hemlock, dawn redwood, baldcypress, and Atlantic white cedar like soil that stays consistently moist while junipers, pines, and the true cedars are well-adapted to dry conditions. Black spruce, balsam fir, and Siberian cypress are at home where winters are bitterly cold while Arizona cypress, Japanese cedar, and deodar cedar thrive in warm temperate areas. Most conifers grow best in full sun, but a bit of afternoon shade is best for the dwarf conifers in hot southern zones. Hemlock, yew, and plumyew tolerate shade well.

When and how do I plant a conifer?

It's best to plant conifers in early autumn unless you live in an area where winters are bitterly cold. In the cool days of autumn, they have more time to make root growth in moist soil. Since good drainage through the soil and ample pore spaces for air are key to the survival of conifer roots, be careful not to plant them too deeply, especially if your soil is heavy or has a lot of clay in it. If you plant a conifer that was grown in a container, prune off any roots that encircle the outside of the root ball. If it was dug and transported with burlap and twine around the root ball, remove as much of the burlap, ties, and wire as you possibly can without injuring the roots. It's best not to amend the soil in the planting site. Compost or peat moss might pamper the roots and discourage the development of a broad, expansive root system. Stake your new tree only if it is planted in a windy location, and apply a couple of inches of shredded hardwood or pine bark mulch to the root zone to preserve soil moisture. Keep the mulch at least six inches away from the trunk. Water deeply and infrequently so the soil stays evenly moist at its depths but dries out partially at the surface between waterings. After the tree has established itself and begun to grow, remove any stakes and wires that were used to support it.

What makes a dwarf conifer dwarf?

Dwarf conifers are dwarf because of their genetics. A single bud in a normal tree may change its genetics and produce a clump of densely branched, dwarf growth. These growths are called witches brooms. Other dwarf conifers originated as slow growing individuals in a population propagated from seed. Dwarf conifers are often propagated by grafting since they are usually difficult to root and will not come true from seed.



How should I prune my conifers?

Conifers, unlike many deciduous and broad-leaved trees and shrubs, should never be pruned too drastically since most of them cannot sprout new growth from old wood. Yew and baldcypress are exceptions to this general rule and can sprout new growth even if cut back severely.

Never remove more than one third of the total growth at one time, and be sure to leave some green tissue that has potential to produce new growth. Never remove all of the green portion of conifers like juniper and arborvitae by shearing them. Removal of much of the green growth can result in a permanently misshapen plant or death of the plant. Control the size of sprawling conifers by pruning the longest branches back to where they meet with a shorter branch.

Pines can be shaped and forced to produce denser growth by a pruning technique known as candling. Candles are the elongated shoots produced at the beginning of each flush of growth. After the candles are fully grown, needles grow out of the candles. The candles can branch while they are growing if they are pruned before the needles begin to emerge. Break off about two-thirds of the candle with your fingers. Don't use pruners since you are likely to damage remaining needles, causing them to look unsightly.

What are some other sources for information about conifers?

If you're interested in buying some conifers, ask your local nursery or extension educator for information on those that can be grown in your area. If you are looking for a particular variety, check our [Plant Sources Page](#) for tips on finding a supplier.

For the basics on gardening with conifers, look for the Brooklyn Botanic Garden handbook titled *Growing Conifers Four Season Plants*. Visit www.bbg.org for ordering information.

The Gotelli Collection of Dwarf and Slow Growing Conifers is the subject of Sandra McLean Cutler's book titled *Dwarf and Unusual Conifers Coming of Age*. It is available from the publisher at www.bartonbradley.com.

If you're a conifer lover, you can join other conifer enthusiasts by visiting the American Conifer Society at www.conifersociety.org.



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